

## 09548849 CLSTITLES

Titles of Most Frequently Occurring Classifications of Patents Returned

From A Search of 09548849 on July 31, 2003

|    |         |  |
|----|---------|--|
| 14 | 712/35  | (9 OR, 5 XR)   |
|    | Class   | 712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: PROCESSING ARCHITECTURES AND INS TRUCTION |
|    |         | PROCESSING   |
|    | 712/1   | PROCESSING ARCHITECTURE  |
|    | 712/32  | .Microprocessor or multichip or multimodule processor having sequential program control              |
| ol | 712/34  | ..Including coprocessor  |
|    | 712/35  | ...Digital Signal processor  |
| 6  | 712/36  | (3 OR, 3 XR)   |
|    | Class   | 712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: PROCESSING ARCHITECTURES AND INS TRUCTION |
|    |         | PROCESSING   |
|    | 712/1   | PROCESSING ARCHITECTURE  |
|    | 712/32  | .Microprocessor or multichip or multimodule processor having sequential program control              |
| 1  | 712/36  | ..Application specific   |
| 5  | 341/143 | (2 OR, 3 XR)   |
|    | Class   | 341 : CODED DATA GENERATION OR CONVERSION  |
|    | 341/126 | ANALOG TO OR FROM DIGITAL CONVERSION   |
|    | 341/143 | .Differential encoder and/or decoder (e.g., delta modulation, differential pulse code m odulation)   |
| 5  | 712/32  | (2 OR, 3 XR)   |
|    | Class   | 712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: PROCESSING ARCHITECTURES AND INS TRUCTION |
|    |         | PROCESSING   |
|    | 712/1   | PROCESSING ARCHITECTURE  |
|    | 712/32  | .Microprocessor or multichip or multimodule processor having sequential program control              |
| 4  | 345/503 | (1 OR, 3 XR)   |
|    | Class   | 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL              |

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DISPLAY

SYSTEMS

345/501 COMPUTER GRAPHIC PROCESSING SYSTEM  
345/502 .Plural graphics processors  
345/503 ..Coprocessor (e.g., graphic accelerator)

3 84/604 (0 OR, 3 XR)  
Class 084 : MUSIC  
84/1 INSTRUMENTS  
84/600 .Electrical musical tone generation  
84/601 ..Data storage  
84/602 ...Digital memory circuit (e.g., RAM, ROM,  
etc.)  
84/604 ....Waveform memory

3 341/144 (0 OR, 3 XR)  
Class 341 : CODED DATA GENERATION OR CONVERSION  
341/126 ANALOG TO OR FROM DIGITAL CONVERSION  
341/144 .Digital to analog conversion

3 341/172 (0 OR, 3 XR)  
Class 341 : CODED DATA GENERATION OR CONVERSION  
341/126 ANALOG TO OR FROM DIGITAL CONVERSION  
341/155 .Analog to digital conversion  
341/172 ..Using charge transfer devices (e.g., charge  
coupled devices, charge transfer by switches  
d capacitances)

3 375/295 (1 OR, 2 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/295 TRANSMITTERS

3 375/350 (1 OR, 2 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/316 RECEIVERS  
375/346 .Interference or noise reduction  
375/350 ..By filtering (e.g., digital)

3 700/2 (0 OR, 3 XR)  
Class 700 : DATA PROCESSING: GENERIC CONTROL SYSTEMS OR  
SPECIFIC APPLICATIONS  
700/1 GENERIC CONTROL SYSTEM, APPARATUS OR PROCESS  
700/2 .Plural processors

3 704/500 (1 OR, 2 XR)  
Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO

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COMPRESSION/DECOMPRESSION  
704/500                   AUDIO SIGNAL BANDWIDTH COMPRESSION OR EXPANSION

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- 3 708/313               (1 OR, 2 XR)  
Class 708 : ELECTRICAL COMPUTERS: ARITHMETIC PROCESSING  
          AND CALCULATING  
708/100                  ELECTRICAL DIGITAL CALCULATING COMPUTER  
708/200                  .Particular function performed  
708/300                  ..Filtering  
708/313                  ...Decimation/interpolation
- 3 708/320               (3 OR, 0 XR)  
Class 708 : ELECTRICAL COMPUTERS: ARITHMETIC PROCESSING  
          AND CALCULATING  
708/100                  ELECTRICAL DIGITAL CALCULATING COMPUTER  
708/200                  .Particular function performed  
708/300                  ..Filtering  
708/320                  ...Recursive
- 3 708/523.              (0 OR, 3 XR)  
Class 708 : ELECTRICAL COMPUTERS: ARITHMETIC PROCESSING  
          AND CALCULATING  
708/100                  ELECTRICAL DIGITAL CALCULATING COMPUTER  
708/200                  .Particular function performed  
708/490                  ..Arithmetical operation  
708/523                  ...Multiplication followed by addition (i.e.,  
                           x\*y+z)
- 3 712/37               (1 OR, 2 XR)  
Class 712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
          SYSTEMS: PROCESSING ARCHITECTURES AND INS  
TRUCTION  
                         PROCESSING  
712/1                   PROCESSING ARCHITECTURE  
712/32                  .Microprocessor or multichip or multimodule  
                         processor having sequential program contro  
1  
712/37                  ..Programmable (e.g., EPROM)
- 2 84/621               (0 OR, 2 XR)  
Class 084 : MUSIC  
84/1                   INSTRUMENTS  
84/600                  .Electrical musical tone generation  
84/601                  ..Data storage  
84/602                  ...Digital memory circuit (e.g., RAM, ROM,

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etc.)

- 84/621 ....Noise reduction (e.g., error prevention)
- 2 84/622 (2 OR, 0 XR)  
Class 084 : MUSIC  
84/1 INSTRUMENTS  
84/600 .Electrical musical tone generation  
84/601 ..Data storage  
84/602 ...Digital memory circuit (e.g., RAM, ROM,  
etc.)  
84/622 ....Tone synthesis or timbre control
- 2 84/627 (1 OR, 1 XR)  
Class 084 : MUSIC  
84/1 INSTRUMENTS  
84/600 .Electrical musical tone generation  
84/601 ..Data storage  
84/602 ...Digital memory circuit (e.g., RAM, ROM,  
etc.)  
84/626 ....Expression or special effects (e.g., force  
or velocity responsive, etc.)  
84/627 .....Envelope shaping (i.e., attack, decay,  
sustain, or release)
- 2 326/40 (0 OR, 2 XR)  
Class 326 : ELECTRONIC DIGITAL LOGIC CIRCUITRY  
326/37 MULTIFUNCTIONAL OR PROGRAMMABLE (E.G.,  
UNIVERSAL, ETC.)  
326/39 .Array (e.g., PLA, PAL, PLD, etc.)  
326/40 ..With flip-flop or sequential device
- 2 326/41 (0 OR, 2 XR)  
Class 326 : ELECTRONIC DIGITAL LOGIC CIRCUITRY  
326/37 MULTIFUNCTIONAL OR PROGRAMMABLE (E.G.,  
UNIVERSAL, ETC.)  
326/39 .Array (e.g., PLA, PAL, PLD, etc.)  
326/41 ..Significant integrated structure, layout, or  
layout interconnections
- 2 327/557 (2 OR, 0 XR)  
Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR  
DEVICES, CIRCUITS, AND SYSTEMS  
327/524 SPECIFIC IDENTIFIABLE DEVICE, CIRCUIT, OR  
SYSTEM  
327/551 .Unwanted signal suppression  
327/552 ..Active filter  
327/557 ...Bandpass

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2 330/51 (0 OR, 2 XR)  
Class 330 : AMPLIFIERS  
330/51 COMBINED WITH AUTOMATIC AMPLIFIER DISABLING  
SWITCH MEANS

2 330/9 (0 OR, 2 XR)  
Class 330 : AMPLIFIERS  
330/9 WITH PERIODIC SWITCHING INPUT-OUTPUT (E.G., FO  
R DRIFT CORRECTION)

2 341/110 (2 OR, 0 XR)  
Class 341 : CODED DATA GENERATION OR CONVERSION  
341/110 ANALOG TO DIGITAL CONVERSION FOLLOWED BY  
DIGITAL TO ANALOG CONVERSION

2 341/118 (1 OR, 1 XR)  
Class 341 : CODED DATA GENERATION OR CONVERSION  
341/118 CONVERTER COMPENSATION

2 341/139 (2 OR, 0 XR)  
Class 341 : CODED DATA GENERATION OR CONVERSION  
341/126 ANALOG TO OR FROM DIGITAL CONVERSION  
341/138 ..Nonlinear  
341/139 ..Automatic control for increasing converter  
range (e.g., gain ranging, automatic gain c  
ontrol)

2 341/155 (0 OR, 2 XR)  
Class 341 : CODED DATA GENERATION OR CONVERSION  
341/126 ANALOG TO OR FROM DIGITAL CONVERSION  
341/155 ..Analog to digital conversion

2 341/61 (2 OR, 0 XR)  
Class 341 : CODED DATA GENERATION OR CONVERSION  
341/50 DIGITAL CODE TO DIGITAL CODE CONVERTERS  
341/61 ..Data rate conversion

2 345/505 (1 OR, 1 XR)  
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR  
INTERFACE PROCESSING, AND SELECTIVE VISUAL  
DISPLAY

SYSTEMS  
345/501 COMPUTER GRAPHIC PROCESSING SYSTEM  
345/502 ..Plural graphics processors  
345/505 ..Parallel processors (e.g., identical  
processors)

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2 345/522 (0 OR, 2 XR)  
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR  
INTERFACE PROCESSING, AND SELECTIVE VISUAL  
DISPLAY

SYSTEMS

345/501 COMPUTER GRAPHIC PROCESSING SYSTEM  
345/522 .Graphic command processing

2 345/582 (2 OR, 0 XR)  
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR  
INTERFACE PROCESSING, AND SELECTIVE VISUAL  
DISPLAY

SYSTEMS

345/418 COMPUTER GRAPHICS PROCESSING  
345/581 .Attributes (surface detail or characteristic,  
display attributes)  
345/582 ..Texture

2 345/600 (0 OR, 2 XR)  
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR  
INTERFACE PROCESSING, AND SELECTIVE VISUAL  
DISPLAY

SYSTEMS

345/418 COMPUTER GRAPHICS PROCESSING  
345/581 .Attributes (surface detail or characteristic,  
display attributes)  
345/589 ..Color or intensity  
345/600 ...Color bit data modification or conversion

2 370/338 (0 OR, 2 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/310 COMMUNICATION OVER FREE SPACE  
370/328 .Having a plurality of contiguous regions  
served by respective fixed stations  
370/338 ..Contiguous regions interconnected by a local  
area network

2 370/429 (0 OR, 2 XR)  
Class 370 : MULTIPLEX COMMUNICATIONS  
370/351 PATHFINDING OR ROUTING  
370/428 .Store and forward  
370/429 ..Particular storing and queuing arrangement

2 375/345 (0 OR, 2 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/316 RECEIVERS  
375/345 .Automatic gain control

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2 375/377 (1 OR, 1 XR)  
Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
375/377 MISCELLANEOUS

2 380/270 (1 OR, 1 XR)  
Class 380 : CRYPTOGRAPHY  
380/255 COMMUNICATION SYSTEM USING CRYPTOGRAPHY  
380/270 .Wireless communication

2 382/304 (0 OR, 2 XR)  
Class 382 : IMAGE ANALYSIS  
382/276 IMAGE TRANSFORMATION OR PREPROCESSING  
382/302 .Multilayered image transformations  
382/304 ..Parallel processing

2 704/501 (0 OR, 2 XR)  
Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO  
COMPRESSION/DECOMPRESSION  
704/500 AUDIO SIGNAL BANDWIDTH COMPRESSION OR EXPANSION

N  
704/501 .With content reduction encoding

2 704/504 (0 OR, 2 XR)  
Class 704 : DATA PROCESSING: SPEECH SIGNAL PROCESSING,  
LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO  
COMPRESSION/DECOMPRESSION  
704/503 AUDIO SIGNAL TIME COMPRESSION OR EXPANSION  
(E.G., RUN LENGTH CODING)  
704/504 .With content reduction encoding

2 708/230 (2 OR, 0 XR)  
Class 708 : ELECTRICAL COMPUTERS: ARITHMETIC PROCESSING  
AND CALCULATING  
708/100 ELECTRICAL DIGITAL CALCULATING COMPUTER  
708/200 .Particular function performed  
708/230 ..Multifunctional

2 708/232 (0 OR, 2 XR)  
Class 708 : ELECTRICAL COMPUTERS: ARITHMETIC PROCESSING  
AND CALCULATING  
708/100 ELECTRICAL DIGITAL CALCULATING COMPUTER  
708/200 .Particular function performed  
708/230 ..Multifunctional  
708/232 ...Array of elements (e.g., AND/OR array, etc.)

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2 708/301 (0 OR, 2 XR)  
Class 708 : ELECTRICAL COMPUTERS: ARITHMETIC PROCESSING  
AND CALCULATING  
708/100 ELECTRICAL DIGITAL CALCULATING COMPUTER  
708/200 .Particular function performed  
708/300 ..Filtering  
708/301 ...Tapped delay line

2 708/319 (1 OR, 1 XR)  
Class 708 : ELECTRICAL COMPUTERS: ARITHMETIC PROCESSING  
AND CALCULATING  
708/100 ELECTRICAL DIGITAL CALCULATING COMPUTER  
708/200 .Particular function performed  
708/300 ..Filtering  
708/319 ...Transversal

2 708/322 (0 OR, 2 XR)  
Class 708 : ELECTRICAL COMPUTERS: ARITHMETIC PROCESSING  
AND CALCULATING  
708/100 ELECTRICAL DIGITAL CALCULATING COMPUTER  
708/200 .Particular function performed  
708/300 ..Filtering  
708/322 ...Adaptive

2 710/100 (1 OR, 1 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT  
710/100 INTRASYSTEM CONNECTION (E.G., BUS AND BUS  
TRANSACTION PROCESSING)

2 710/20 (0 OR, 2 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT  
710/1 INPUT/OUTPUT DATA PROCESSING  
710/20 .Concurrent Input/Output processing and data  
transfer

2 710/22 (1 OR, 1 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT  
710/1 INPUT/OUTPUT DATA PROCESSING  
710/22 .Direct Memory Accessing (DMA)

2 710/5 (2 OR, 0 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA

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PROCESSING SYSTEMS: INPUT/OUTPUT  
710/1            INPUT/OUTPUT DATA PROCESSING  
710/5            .Input/Output command process

2 711/118        (0 OR, 2 XR)  
Class    711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
            SYSTEMS: MEMORY  
711/100        STORAGE ACCESSING AND CONTROL  
711/117        .Hierarchical memories  
711/118        ..Caching

2 711/147        (0 OR, 2 XR)  
Class    711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
            SYSTEMS: MEMORY  
711/100        STORAGE ACCESSING AND CONTROL  
711/147        .Shared memory area

2 711/168        (0 OR, 2 XR)  
Class    711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
            SYSTEMS: MEMORY  
711/100        STORAGE ACCESSING AND CONTROL  
711/167        .Access timing  
711/168        ..Concurrent accessing

2 711/217        (0 OR, 2 XR)  
Class    711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
            SYSTEMS: MEMORY  
711/200        ADDRESS FORMATION  
711/217        .Generating a particular pattern/sequence of  
                  addresses

2 711/220        (2 OR, 0 XR)  
Class    711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
            SYSTEMS: MEMORY  
711/200        ADDRESS FORMATION  
711/220        .Combining two or more values to create address  
s

2 712/1        (2 OR, 0 XR)  
Class    712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
            SYSTEMS: PROCESSING ARCHITECTURES AND INS  
TRUCTION  
                  PROCESSING  
712/1        PROCESSING ARCHITECTURE

2 712/200        (0 OR, 2 XR)  
Class    712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING

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SYSTEMS: PROCESSING ARCHITECTURES AND INS

TRUCTION  
                  PROCESSING  
                  712/200     ARCHITECTURE BASED INSTRUCTION PROCESSING

2 712/22        (0 OR, 2 XR)  
Class    712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
                  SYSTEMS: PROCESSING ARCHITECTURES AND INS

TRUCTION  
                  PROCESSING  
                  712/1      PROCESSING ARCHITECTURE  
                  712/10     .Array processor  
                  712/16     ..Array processor operation  
                  712/22     ...Single instruction, multiple data (SIMD)

2 712/221       (0 OR, 2 XR)  
Class    712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
                  SYSTEMS: PROCESSING ARCHITECTURES AND INS

TRUCTION  
                  PROCESSING  
                  712/220    PROCESSING CONTROL  
                  712/221    .Arithmetic operation instruction processing

2 712/28        (1 OR, 1 XR)  
Class    712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
                  SYSTEMS: PROCESSING ARCHITECTURES AND INS

TRUCTION  
                  PROCESSING  
                  712/1      PROCESSING ARCHITECTURE  
                  712/28     .Distributed processing system

2 712/34        (0 OR, 2 XR)  
Class    712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
                  SYSTEMS: PROCESSING ARCHITECTURES AND INS

TRUCTION  
                  PROCESSING  
                  712/1      PROCESSING ARCHITECTURE  
                  712/32     .Microprocessor or multichip or multimodule  
                          processor having sequential program contro  
1  
                  712/34     ..Including coprocessor

2 712/42        (1 OR, 1 XR)  
Class    712 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
                  SYSTEMS: PROCESSING ARCHITECTURES AND INS

TRUCTION  
                  PROCESSING  
                  712/1      PROCESSING ARCHITECTURE

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712/32 .Microprocessor or multichip or multimodule  
processor having sequential program contro

1

712/42 ..Operation

2 715/500.1 (0 OR, 2 XR)

Class 715 : DATA PROCESSING: PRESENTATION PROCESSING OF  
DOCUMENT

715/500.1 SYNCHRONIZATION OF DIVERSE MEDIA